

## MASTER'S THESIS PRESENTATION

# Analysis of Serial Founder Effect on Phonemic Diversity

## WHEN

February, 11, 2022  
11:00 AM, CST

## WHERE

Via ZOOM

ZOOM information will be provided in the email announcement for this seminar.

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Inspired by Q.D. Atkinson's 'Out of Africa' hypothesis and data analysis in the paper *Phonemic diversity supports a serial founder effect model of language expansion from Africa* (15 April 2011), this paper aims to explore the hypothesis on an updated, more extensive dataset. Atkinson's hypothesis is that, just like human, evolution and migration, the same idea holds for linguistic diversity; languages originated from somewhere in Africa, more precisely a single location, and that they evolved and diffused into different parts of the world as people migrated out of Africa. The two main factors considered in the hypothesis are geographic distance from an origin point and speaker population size. A smaller migrating population carries less diversity than the ancestral population. Hence, the further the distance from origin while taking account speaker population size, we expect the diversity of sounds (number of phonemes) to be decreasing. This paper also points out and addresses fundamental flaws presented in Atkinson's analysis such as the oversimplification of his dataset, disproportionate combination of the phonemes and ignoring correlations between languages family that lead to his conclusions being exaggerated.

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